

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Jul 2026

Effect of non-surgical periodontal therapy on serum 25-hydroxyvitamin D level in postmenopausal women with chronic periodontitis.

Protocol summary

Study aim

The aim of this study is to measure the serum 25-hydroxyvitamin-D concentration changes of postmenopausal women with chronic periodontitis before and after non-surgical periodontal treatment and to evaluate the correlation between those changes and clinical periodontal parameters.

Design

Two arm, parallel, not blinded trial (postoperative care and outcome assessment). Randomization was computerized with concealed randomization sequence carried out at an external site.

Settings and conduct

People with inclusion criteria who refer to Tabriz University periodontics ward, enter to study after giving informed consent.

Participants/Inclusion and exclusion criteria

inclusion criteria: This study is performed on postmenopausal women who are at least 50 years old, and a year, at least, is passed since the menopause has begun; PD greater than or equal to 5mm; generalized attachment loss greater than or equal to 5 mm (more than 30% of the sites are involved); presence of radiographic evidence of alveolar bone loss. Exclusion criteria: 1) a history of NSAIDs or antimicrobial drugs intake within a 6 month period before the study; 2) history of any periodontal treatment within a 6 month period before the study; 3) presence of any systemic disease and infection other than chronic periodontitis; 4) presence of aggressive periodontitis; 5) presence of systemic diseases that interfere with bone metabolism and immune system, such as kidney failure, diabetes and the presence of bone lesions. 6) use of mouthwashes or vitamin supplements within the previous 3 months

Intervention groups

Intervention: Patients in the chronic periodontitis group received nonsurgical periodontal therapy, including oral hygiene instructions (flossing & brushing with Bass technique), and scaling and root planing in one 1 hour

session. then, 0.12 % chlorhexidine mouthwash (Cosmodent Co., Gingival KIN, Spain) was prescribed for 14 days (15ml for 30 seconds twice a day).

Main outcome variables

main outcome variables: serum 25-hydroxyvitamin D is a primary variable and clinical periodontal parameters are secondary variables include serum 25-hydroxyvitamin D levels (by venous blood sample) and clinical periodontal parameters (Pocket depth, Clinical attachment loss, Bleeding on probing, Gingival index, Plaque index by periodontal probe) which are recorded at baseline and 3 months later.

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20110726007128N10**
Registration date: **2018-01-27, 1396/11/07**
Registration timing: **retrospective**

Last update: **2018-01-27, 1396/11/07**

Update count: **0**

Registration date

2018-01-27, 1396/11/07

Registrant information

Name

Adileh Shirmohammadi

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

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Email address

shirmohamadia@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2018-01-02, 1396/10/12

Expected recruitment end date

2018-01-03, 1396/10/13

Actual recruitment start date

2018-01-03, 1396/10/13

Actual recruitment end date

2018-01-04, 1396/10/14

Trial completion date

empty

Scientific title

Effect of non-surgical periodontal therapy on serum 25-hydroxyvitamin D level in postmenopausal women with chronic periodontitis.

Public title

Effect of non-surgical periodontal therapy on serum level of 25-hydroxyvitamin D and clinical parameters in patients with periodontal disease

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria:

postmenopausal women who are at least 50 years old, and at least one year is passed since the menopausal beginning. Pocket depth is greater than or equal to 5mm generalized attachment loss greater than or equal to 5 mm (more than 30% of the sites are involved) radiographic evidence of alveolar bone loss

Exclusion criteria:

The history of NSAIDs or antimicrobial drugs intake within previous 6 months The history of any periodontal treatment within previous 6 months The presence of any systemic disease and infection The presence of aggressive periodontitis use of mouthwashes or vitamin supplements within the previous 3 months

Age

From **50 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Actual sample size reached: **27**

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee of Tabriz University of Medical Sciences

Street address

Tabriz University of Medical Sciences, Golgasht St., Daneshgah St., Tabriz

City

Tabriz

Province

East Azarbaijan

Postal code

5371733671

Approval date

2018-01-01, 1396/10/11

Ethics committee reference number

IR.TBZMED.REC.1396.919

Health conditions studied

1

Description of health condition studied

Chronic periodontitis

ICD-10 code

K05.3

ICD-10 code description

Chronic periodontitis

Primary outcomes

1

Description

25-hydroxyvitamin D

Timepoint

Base line-3month

Method of measurement

laboratory test

Secondary outcomes

1

Description

Clinical parameters of periodontium

Timepoint

Base line-3month

Method of measurement

periodontal probing

Intervention groups

1

Description

Intervention group: chronic periodontitis : Patients in the chronic periodontitis group received nonsurgical periodontal therapy, including oral hygiene instructions(flossing & brushing with Bass technique), and scaling and root planing in one 1hour session.then, 0.12 % chlorhexidine mouthwash(Cosmodent Co.,Gingival KIN,Spain) was prescribed for 14 days(15ml for 30seconds twice a day).

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Dentistry faculty of Tabriz, Periodontics ward

Full name of responsible person

Dr. Adileh Shirmohamadi

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Vice chancellor for research of Tabriz University of Medical Sciences

Full name of responsible person

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Vice chancellor for research of Tabriz University of Medical Sciences

Proportion provided by this source

100

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Sanaz Mohammadi

Position

دانشجوی دندانپزشکی

Latest degree

Medical doctor

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Person responsible for scientific inquiries

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Name of organization / entity

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Full name of responsible person

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Position

Periodontist/ Professor

Latest degree

Specialist

Other areas of specialty/work

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Sharing plan**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available